

### REMARKS

Claims 1-31 are pending. Applicant requests reconsideration in light of the following remarks.

By the above amendment, various claims have been amended to more clearly define the invention. The amendments to such claims are not necessitated by the prior art and are not made for reasons of patentability. The new claims 30 and 31 have been supplied to more clearly and particularly define the invention, as supported by the specification, e.g., at page 6, lines 15-16.

In the office action mailed November 24, 2004, the Examiner objected to claim 22 as being in improper dependent form. Applicant has amended the claim 21, from which claim 22 depends, to recite that the pulling apparatus pulls the board at a speed "different from the speed of" both the first upper conveyor and the first lower conveyor.

This amendment should obviate the objection under 27 CFR 1.75(c). Accordingly, Applicant respectfully requests withdrawal of this objection to claim 22.

### Rejections under 35 U.S.C. §103

I In the outstanding office action, the Examiner rejected claims 1-6, 10, 12-20, 24, 26-29 under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 4,992,227 to Brossy (hereinafter, "Brossy") in view of U.S. Patent No. 6,030,559 to Barry (hereinafter, "Barry").

Applicant contends that all the claims are patentable over at least the Brossy reference, taken either alone or in combination with the Barry reference, and requests withdrawal of the rejection under 35 U.S.C. §103.

It is respectfully submitted that the Office Action does not meet the criteria for establishing a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, three criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the applied reference must teach or suggest all the claim limitations. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of

the combination. Further, the fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. See MPEP §2143.

With respect to the first criterion, there is no motivation to modify the method, as set forth in the Brossy, with the Barry reference to meet the claimed invention.

The Examiner admits that Brossy is silent with respect to each of the following features:

- the pulling of the board of fibrous material from the oven with a pulling apparatus downstream of the oven (see Office Action at page 3, lines 2-4 and 12-13),
- applying pressure to a surface of the fibrous board (see Office Action at page 4, lines 1-2),
- the pulling apparatus applying pressure which is sufficient to prevent skidding of the fibrous material within the pulling apparatus (see Office Action at page 4, last two lines and page 5, lines 9-10),
- a pulling apparatus comprising a second conveyor assembly including a second upper conveyor and a second lower conveyor (see Office Action at page 6, lines 1-2 and lines 10-11),
- a pulling apparatus pulling the board of fibrous material (see Office Action at page 7, lines 2-3 and lines 10-11), and
- a pulling apparatus pulling the board of fibrous material at a speed slower than the speed of the at least one of the first upper conveyor and the first lower conveyor (see Office Action at page 8, lines 1-2 and lines 15-16).

The Barry reference fails to teach or supply any of the above features. The Barry reference relates to a method for achieving a uniform thickness of a urethane-type foam that is expanded between opposing facing sheets. According to the Barry reference, an "openwork pattern" fibrous material 13 is used as a reinforcing material as the foam 22 expands against sheets of facing material 11 and 13.

The Examiner's citation for Barry's use of fibrous material, at Col. 4, Line 25-38, must be read along with the description of the fibrous material 13 found in the Barry reference at col. 4, lines 8-10:

"Whatever the pattern, the web's pattern must be discontinuous for easy penetration by the foamable mixture..." (emphasis added),

and further, at col. 4, lines 20-24:

"Web 13 may, for example, have an average opening (circularized) between fibers ranging in size from about 4mm to 16mm. Web 13 is advantageously about 0.0101 to 0.02 inch thick and about 48 to 53 inches wide, and weighs about 0.5 to 1.0 lb. /100 square feet." (emphasis added).

According to the Barry reference, the foam expands between the sheets and through the openings in the web (see Col. 4, lines 3-5). The foam thus encloses the web (see Col. 6, lines 5-6). Also, the Barry openwork pattern web 13 is used to prevent crowning of the foam which is encountered in the "free rise" foaming (see Barry at Col. 3, lines 5-6). As such, the Barry reference is not directed to producing a sheet of rigid fibrous boards, but is directed to producing a foam board that has an openwork patterned web embedded within the foam to prevent crowning of the foam during its "free rise" and to provide reinforcement to the foam board.

Further, the Barry reference discloses the use of facing sheets 11 and 12 which are pulled through the oven by rollers 18 and 19. There is no teaching or suggestion in the Barry reference that the rollers 18 and 19 would orient the web embedded in the foam material. Rather, the sheets 11 and 12 of the Barry reference provide a stable, and non-sheering, environment in which the foam can "free rise". Any movement of the sheets 11 and 12 at different speeds would cause the open cells in the foam to be distorted and not allow the foam to develop its natural rise profile (see Col. 6, lines 12-20).

In contrast, in the present invention, the board of fibrous material is made of continuous fibrous materials, as readily shown in the figures and in the specification at page 3, line 13, and page 6, lines 11-16. The independent claims 1 and 15 recite "manufacturing smooth surface board from fibrous material". No one skilled in the art of manufacturing fibrous board material would look to the "free rise" foam manufacturing industry as described in the Barry reference as a way to smooth the surface of fibrous materials.

The Barry reference fails to address the smooth surfacing solved by the present invention. The Barry reference is not relevant prior art to the present inventive method which provides a method for smoothing the surface of a fibrous board without requiring expending undesirable time and effort in fabricating smooth surfaced fibrous boards. Therefore, at least for this reason the Brossy and/or Barry references, taken alone or in combination with the other cited references, fail to teach or suggest the invention defined in the claims.

Since claims 1 and 15 have been shown to be patentable over applied references, at least for this reason the dependent claims 2-14 and 16-31 are also patentable over those references. Accordingly, Applicant requests withdrawal of this rejection under 35 U.S.C. §103.

II. In the outstanding office action, the Examiner rejected claim 7 under 35 U.S.C. §103 as being unpatentable Brossy in view of Barry and over U.S. Patent No. 4,632,685 to Debouzie (hereinafter, "Debouzie").

Applicant contends that claim 7, which is dependent from claim 1, is further patentable over at least the Brossy reference, taken either alone or in combination with the Barry and Debouzie references, and requests withdrawal of the rejection under 35 U.S.C. §103.

The Examiner admits that Brossy and Barry are silent with respect to the following feature:

- the pulling the boards of fibrous material at a speed different relative to both the first upper conveyor and the first lower conveyor (see Office Action at page 9, lines 13-14).

As clearly set forth above, there is no motivation to look to the Barry reference since Barry is not relevant to the method of smoothing fibrous surfaces. Without the Barry reference, there is no further motivation to find the present inventive method for smoothing the surface of a fibrous board without requiring expending undesirable time and effort in fabricating smooth surfaced fibrous boards in the Debouzie reference.

Since independent claim 1, from which claim 7 depends has been shown to be patentable over applied references, at least for this reason the dependent claim 7 is also patentable over those references.

Therefore, at least for this reason the Brossy and/or Barry and Debouzie references, taken alone or in combination with the other cited references, fail to teach or suggest the

invention defined in claim 7. Accordingly, Applicant requests withdrawal of this rejection under 35 U.S.C. §103.

III. In the outstanding office action, the Examiner rejected claims 8, 21 and 22 under 35 U.S.C. §103 as being unpatentable over Brossy in view of Barry and over U.S. Patent No. 4,632,685 to Debouzie (hereinafter, "Debouzie").

Applicant contends that claim 8, which is dependent from claim 1, and claims 21 and 22, which depend from claim 15, are further patentable over at least the Brossy reference, taken either alone or in combination with the Barry and Debouzie references, and requests withdrawal of the rejection under 35 U.S.C. §103.

The Examiner admits that Brossy, Barry and Debouzie are silent with respect to the following feature:

- the pulling apparatus pulling the board of fibrous material at a speed faster than the speed of both the first upper conveyor and the first lower conveyor (see Office Action at page 10, lines 10-12 and lines 18-20; page 11, lines 18-19; page 12, lines 9-10 and lines 17-18).

As clearly set forth above, there is no motivation to look to the Barry reference since Barry is not relevant to the method of smoothing fibrous surfaces. Without the Barry reference, there is no further motivation to find the present inventive method for smoothing the surface of a fibrous board without requiring expending undesirable time and effort in fabricating smooth surfaced fibrous boards in the Debouzie reference. Therefore, at least for this reason the Brossy and/or Barry and Debouzie references, taken alone or in combination with the other cited references, fail to teach or suggest the invention defined in claim 8, 21 and 22.

Since independent claim 1, from which claim 8, and claim 15, from which claims 21 and 22 depend, has been shown to be patentable over applied references, at least for this reason the dependent claims 8, 21 and 22 are also patentable over those references. Accordingly, Applicant requests withdrawal of this rejection under 35 U.S.C. §103.

IV. In the outstanding office action, the Examiner rejected claims 9 and 23 under 35 U.S.C. §103 as being unpatentable over Brossy in view of Barry and over U.S. Patent No. 4,632,685 to Debouzie (hereinafter, "Debouzie").

Applicant contends that claim 9, which is dependent from claim 1, and claim 23, which depends from claim 15, are further patentable over at least the Brossy reference, taken

either alone or in combination with the Barry and Debouzie references, and requests withdrawal of the rejection under 35 U.S.C. §103.

The Examiner admits that Brossy and Barry are silent with respect to the following feature:

- the pulling apparatus pulling the board of fibrous material at a speed slower than the speed of both the first upper conveyor and the first lower conveyor (see Office Action at page 14-15, and page 14, lines 7-8).

As clearly set forth above, there is no motivation to look to Barry reference since Barry is not relevant to the method of smoothing fibrous surfaces. Without the Barry reference, there is no further motivation to find the present inventive method for smoothing the surface of a fibrous board without requiring expending undesirable time and effort in fabricating smooth surfaced fibrous board in the Debouzie reference. As such, the Debouzie reference fails to teach or supply any of the above discussed features which the Examiner stated were found in the non-relevant Barry reference.

Since independent claim 1, from which claim 9, and claim 15, from which claim 23 depend, have has been shown to be patentable over applied references, at least for this reason the dependent claims 9 and 23 are also patentable over those references.

Therefore, at least for this reason the Brossy and/or Barry and Debouzie references, taken alone or in combination with the other cited references, fail to teach or suggest the invention defined in the claims. Accordingly, Applicant requests withdrawal of this rejection under 35 U.S.C. §103.

V. In the outstanding office action, the Examiner rejected claims 11 and 25 under 35 U.S.C. §103 as being unpatentable Brossy in view of Barry and over U.S. Patent No. 5,843,523 to Mazza (hereinafter, "Mazza").

Applicant contends that claim 11, which is dependent from claim 1, and claim 25, which depends from claim 15, are further patentable over at least the Brossy reference, taken either alone or in combination with the Barry and Mazza references, and requests withdrawal of the rejection under 35 U.S.C. §103.

The Examiner admits that Brossy is silent with respect to the following feature:

- the pulling apparatus comprising a spiked wheel (see Office Action at page 15, lines 13-13 and line 19).

As clearly set forth above, there is no motivation to look to Barry reference since Barry is not relevant to the method of smoothing fibrous surfaces. Without the Barry reference, there is no further motivation to find the present inventive method for smoothing the surface of a fibrous board without requiring expending undesirable time and effort in fabricating smooth surfaced fibrous board in the Mazza reference.

Since independent claim 1, from which claim 11, and claim 15, from which claim 25 depend, have has been shown to be patentable over applied the references, at least for this reason the dependent claims 11 and 25 are also patentable over those references. Therefore, at least for this reason the Brossy and/or Barry and Mazza references, taken alone or in combination with the other cited references, fail to teach or suggest the invention defined in claims 11 and 25. Accordingly, Applicant requests withdrawal of this rejection under 35 U.S.C. §103.

In view of the above amendments and remarks, Applicant has shown that the claims are in proper form for allowance, and the invention, as defined in the claims herein, is neither disclosed nor suggested by the references of record. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the objections and rejections of record, and allowance of all claims.